

**MODEM WITH FIRMWARE UPGRADE FEATURE****Abstract of the Disclosure**

Updated operating code and parameters can be reprogrammed into a  
5 modem system with no disassembly of the modem hardware. The modem system  
includes a memory chip in which operating code and parameters are stored. Two  
control programs control the reprogramming of updated operating code. One of the  
control programs is designed for manufacturing and testing purposes. The other  
control program allows remote reprogramming of updated operating code or  
10 parameters from a remote location such as a customer site. A user can thus remotely  
upgrade system firmware with updates, bug fixes, enhancements or other new  
releases of system operating code by downloading the update over a phone line to a  
host PC and reprogramming the memory chip of the modem over the serial port  
from the host PC. The user can also remotely upgrade the modem system firmware  
15 by directly programming the memory chip of the modem without the assistance of  
the host PC. The modem system is portable, obtaining power from a standard 9 volt  
battery. Therefore, various power saving features are also incorporated into the  
modem system.

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